## **REMARKS/ARGUMENTS**

Favorable reconsideration of this application is requested in view of the following remarks. Claims 1-21 remain pending in the case.

## 35 U.S.C. §102 Rejections

In paragraph 2 on page 2 of the Office Action, claims 1 - 7 were rejected under 35 U.S.C. 102(e) as being anticipated by Takashi et al. (U.S. Pat. No. 6,519,715). According to the Office Action, Takashi discloses Applicant's invention substantially as claimed.

Applicant respectfully traverses this rejection. Applicant respectfully submits that the cited reference does not disclose or teach the invention. Applicant submits that there are patentable differences between the cited reference and Applicant's invention.

Applicant's invention differs from the cited reference in at least the following respects.

Claims 1-7 of the present invention require at least a write head including a write element and a thermal asperity detector. Further, claims 1-7 require detecting magnetic defects on the first data track with a certification head and scanning the first data track for thermal asperities with the thermal asperity detector. Hence, while the certification head is scanning a data track, the thermal asperity detector on the write head is used to detect thermal asperities on the data track.

Takashi fails to disclose at least a write head including a write element and a thermal asperity detector. Rather, Takashi merely discloses a single head 53. More specifically, Takashi discloses a circuit 17 that detects a thermal asperity (TA) signal when the head 53 is in contact with a magnetic recording media 54. (col. lines 42-50). Even if the head 53 of Takashi could be construed as a thermal asperity detector, in which Applicant does not acquiesce, Takashi fails to disclose detecting magnetic defects on the first data track with a certification head, and scanning the first data track for thermal asperities with the thermal asperity detector in the write head. Takashi does not even consider both a certification head and write head including a write element and a thermal asperity detector.

Therefore, in view of the above remarks, Applicant's independent claims 1 and 4 and dependent claims 2-3 and 5-7 are patentable over the cited reference.

In paragraph 3 on page 4 of the Office Action, claim 8 was rejected under 35 U.S.C. 102(e) as being anticipated by Li (U.S. Pat. No.6,421,193). According to the Office Action, Li discloses Applicant's invention substantially as claimed.

Applicant respectfully traverses this rejection, but in the interest of prosecution has amended claim 8 to clarify the invention. Support for the amendments can be found at least on page 12 of Applicant's Specification. Applicant respectfully submits that the cited reference does not disclose or teach the invention as amended.

Claim 8 requires at least a write head including a write element and a thermal asperity detector for writing a first data track to a disc, and a certification head for detecting magnetic defects on the first data track, wherein the thermal asperity detector simultaneously scans the first data track for thermal asperities while the certification head detects for magnetic defects.

Li fails to disclose or suggest at least write head including a write element and a thermal asperity detector for writing a first data track to a disc. Rather, Li merely discloses a merged MR head including a read head portion and a write head portion. (col. 4, lines 47-52; Fig. 2). Li discloses monitoring preamplifier output to detect a thermal event using the read portion of the MR head. (col. 7, lines 20-27; col. 7, lines 50-51). Li does not even consider a thermal asperity detector in the write head portion.

Even if the head of Li could be construed as a thermal asperity detector, in which Applicant does not acquiesce, Li fails to disclose or suggest at least a certification head for detecting magnetic defects on the first data track. Accordingly, Li fails to disclose or suggest that a thermal asperity detector simultaneously scans a first data track for thermal asperities while the certification head detects for magnetic defects.

Therefore, in view of the above remarks, Applicant's independent claim 8 is patentable over the cited reference.

## 35 U.S.C. §103 Rejections

In paragraph 5 on page 5 of the Office Action, claims 13 and 14 were rejected under 35 U.S.C. 103(a) as being unpatentable over Takashi et al. (U.S. Pat. 6, 519, 715).

Applicant respectfully traverses these rejections, but in the interest of prosecution has amended the claims to clarify the invention. Applicant respectfully submits that the

cited references, alone or in combination, do not disclose or teach the invention as amended. Applicant's invention differs from the cited references in at least the following respects.

As discussed above, Takashi fails to disclose or suggest at least a write head including a write element and a thermal asperity detector. Further, Takashi fails to disclose or suggest that the asperity detector, included in the write head, is activated to detect asperities during a second period and a read head positioned to certify the track written by the write element during the second period. Rather, Takashi merely discloses a single head 53.

Therefore, in view of the above remarks, Applicant's independent claims 13 and 14 are patentable over the cited reference.

In paragraph 6 on page 6 of the Office Action, dependent claim 12 was rejected under 35 U.S.C. 103(a) as being unpatentable over Li in view of Smith et al. (U.S. Pat. No. 6,154, 335). Applicant respectfully traverses this rejection.

As discussed above with respect to claim 8, Li fails to disclose or suggest at least write head including a write element and a thermal asperity detector for writing a first data track to a disc. Smith fails to remedy the deficiencies of Li. Smith fails to disclose or suggest a write head including a write element and a thermal asperity detector for writing a first data track to a disc. Further, Smith fails to at least disclose a certification head for detecting magnetic defects on the first data track. Also, Smith fails to disclose or suggest that a thermal asperity detector simultaneously scans a first data track for thermal asperities while the certification head detects for magnetic defects.

Therefore, because claim 12 depends from claim 8 and includes the features recited in the independent claim, Applicant respectfully submits that claim 12 is also patentably distinct over the cited references.

In paragraph 7 on page 6 of the Office Action, dependent claim 17 was rejected under 35 U.S.C. 103(a) as being unpatentable over Takashi et al. in view of Smith et al. (U.S. Pat. No. 6,154, 335). Applicant respectfully traverses this rejection.

As discussed above with respect to claims 13 and 14, Takashi fails to disclose Applicant's invention. Smith fails to remedy the deficiencies of Takashi. Smith fails to disclose or suggest at least a write head including a write element and a thermal asperity

detector for writing a first data track to a disc. Further, Smith fails to at least disclose or suggest a certification head for detecting magnetic defects on the first data track. Also, Smith fails to disclose or suggest that a thermal asperity detector simultaneously scans a first data track for thermal asperities while the certification head detects for magnetic defects.

Therefore, because claim 17 depends from claim 14 and includes the features recited in the independent claim, Applicant respectfully submits that claim 17 is also patentably distinct over the cited references.

In paragraph 8 on page 7 of the Office Action, dependent claims 9 and 10 were rejected under 35 U.S.C. 103(a) as being unpatentable over Li in view of Gill (U.S. Pat. No. 5,909,344). Applicant respectfully traverses this rejection.

As discussed above with respect to claim 8, Li fails to disclose or suggest Applicant's invention. Gill fails to remedy the deficiencies of Li. Gill fails to disclose or suggest a write head including a write element and a thermal asperity detector for writing a first data track to a disc. Further, Gill fails to at least disclose a certification head for detecting magnetic defects on the first data track. Also, Gill fails to disclose or suggest that a thermal asperity detector simultaneously scans a first data track for thermal asperities while the certification head detects for magnetic defects.

Therefore, because claims 9 and 10 depend from claim 8 and include the features recited in the independent claim, Applicant respectfully submits that claims 9 and 10 are also patentably distinct over the cited references.

In paragraph 9 on page 8 of the Office Action, dependent claims 16 and 18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Li and Takashi as applied to claims 8 and 14 above, and further in view of Gill (U.S. Pat. No. 5, 909, 344).

As discussed above, Li fails to disclose Applicant's invention. Also, Takashi fails to remedy the deficiencies of Li. Further, Gill fails to remedy the deficiencies of Li and Takashi.

Therefore, because claims 16 and 18 depend from claim 14 and include the features recited in the independent claim, Applicant respectfully submits that claims 16 and 18 are also patentably distinct over the cited references.

In paragraph 10 on page 9 of the Office Action, dependent claim 19 was rejected under 35 U.S.C. 103(a) as being unpatentable over Takashi et al. as applied to claim 14 above, and further in view of Spainger (U. S. Pat. No. 5,122, 917).

As discussed above, Takashi fails to disclose Applicant's invention. However, Spainger fails to remedy the deficiencies of Takashi.

Therefore, because claim 19 depends from claim 14 and includes the features recited in the independent claim, Applicant respectfully submits that claim 19 is also patentably distinct over the cited references.

Applicant is not conceding the correctness of the Office Action's rejections with respect to the dependent claims and reserves the right to make additional arguments as may be necessary.

## Conclusion

Applicant respectfully requests that a timely Notice of Allowance be issued in this case. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at 612/336-4755.

Respectfully submitted,

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Dated: 25 August 2003

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